

In the claims:

Claims 1-57 (cancelled)

58. **(previously presented)** A method for determining a decrease in the activity of osteoprotegerin binding protein (OPGbp) comprising: adding a compound to an in vitro assay under conditions where the compound binds OPGbp of Figure 4 (SEQ ID NO: 4) or a soluble form thereof; and measuring the activity of OPGbp, wherein a decrease in osteoclast formation in the presence of the compound indicates that the compound decreases the activity of OPGbp.

59. **(previously presented)** The method of Claim 58 wherein the compound binds to OPGbp of Figure 4 (SEQ ID NO:4).

60. **(cancelled).**

61. **(previously presented)** The method of Claim 58 wherein the compound binds to an extracellular domain of human OPGbp comprising residues 69-317 as shown in SEQ ID NO:4 or a fragment thereof.

62. **(previously presented)** The method of Claim 58 wherein the activity of OPGbp being measured is osteoclast formation.

63. **(previously presented)** The method of Claim 58 wherein osteoclast formation is measured in a cell culture assay.

64. **(cancelled).**

65. **(previously presented)** The method of Claim 58 wherein a decrease in osteoclast formation results in an increase in bone density.

66. **(previously presented)** The method of Claim 58 wherein the compound increases bone density.

67. **(previously presented)** The method of Claim 58 wherein the compound decreases bone resorption.

68. **(previously presented)** The method of Claim 58 wherein the compound is an antibody or binding fragment thereof.

69-70. **(cancelled)**.

71. **(previously presented)** The method of Claim 68 wherein the antibody or binding fragment thereof is a recombinant antibody or binding fragment thereof.

72. **(previously presented)** The method of Claim 68 wherein the antibody or binding fragment thereof is a chimeric antibody or a CDR-grafted antibody or binding fragment thereof.

73. **(previously presented)** The method of Claim 68 wherein the antibody or binding fragment thereof is a human antibody or binding fragment thereof.